

# LABORATORY EQUIPMENT

 **BOECO**  
Germany



# BALANCES



BBC 22

The BBI/BBC balances are equipped with fully automatic, internal calibration, which provides an optimal weighing reliability at any place of installation because of the built-in highly accurate motorized calibration weight. Self-calibration at the touch of a key!

## BOECO BBC MODEL

Semi-Micro Analytical balance with motorized internal calibration weight

Model	Readability	Capacity	Pan size
BBC 22	0,00001 g	60 g	80 mm Ø
	0,0001 g	210 g	(dual range)



BBI 31  
BBI 32

## BOECO BBI MODELS

with motorized internal calibration weight

Model	Readability	Capacity	Pan size
BBI 31	0,0001 g	230 g	90 mm Ø
BBI 32	0,0001 g	110 g	90 mm Ø
BBI 41	0,001 g	600 g	115 mm Ø
BBI 51	0,01 g	6000 g	180 x 180 mm

The BBI models feature a large backlit display and a user-guidance which is carried out by short-text-terms. This allows the user to configure and operate the balance easily, almost without the instruction manual. The BBI balances have an extremely short response time (2,5 sec. for models BBI 31+32 and 1 sec. for model BBI 41 and BBI 51). The standard RS 232 interface allows to prepare an ISO/GLP conforming protocol.



BBI 41

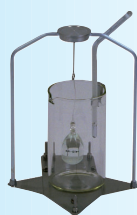
The BBC/BBI analytical balances feature the latest edition of monolithic weighing technology. The BBC/BBI balances offer various application programs:

- ▶ counting
- ▶ weighing in percent
- ▶ net total (formulation)
- ▶ calculating
- ▶ mass unit conversion by toggling
- ▶ animal weighing / averaging
- ▶ different weight units (Grains, Pounds, Carats etc...)
- ▶ 3 years warranty for BBC 22, 5 years warranty for BBI models



BBI 51

The BBI/BBC balances are equipped with a RS-232 C interface port; overload protection; hanger for below-balance weighing; jack for connecting a rechargeable battery pack, AC adapter.



SDK 01

## ACCESSORIES FOR BBC/BBI BALANCES

Code	Description
SDK 01	Kit for determination of density and the specific weight of solids and liquids. For models BBC 22, BBI 31, BBI 32
SPR 02	Printer (see also page 17)

The BBL balances series give you reliable weighing technology, speed, stability and high-quality craftsmanship with excellent price / performance in a really compact package.

The analytical balances feature a Monolithic Double Lever System, the precision balances a strain gauge weighing system. All Models provide automatic calibration by an external calibration weight.

The display is easy to read and the keys for control are logically arranged.

The BBL balances offer various application programs:

- ▶ counting
- ▶ weighing in percent
- ▶ net total formulation
- ▶ mass unit conversion by toggling
- ▶ animal weighing
- ▶ different weight units (Grains, Pounds, Carats etc...)
- ▶ 3 years warranty

BBL 54, 61, 62, 63, 64 and 71 can be used as „portable balances“, because they can weigh using a standard 9-V block battery installed inside the balance instead of using an AC outlet. The balance shuts off automatically after 2 minutes of non-use to extend the battery life.

The BBL balances can be equipped optionally with a RS-232 interface for a connection with a printer or PC.

## BOECO BBL MODELS

Model	Readability	Capacity	Pan size
BBL 31	0,0001 g	210 g	80 mm Ø
BBL 32	0,0001 g	120 g	80 mm Ø
BBL 41	0,001 g	300 g	100 mm Ø
BBL 42	0,001 g	150 g	100 mm Ø
BBL 51	0,01 g	3000 g	174 x 143 mm
BBL 52	0,01 g	1500 g	174 x 143 mm
BBL 53	0,01 g	610 g	116 mm Ø
BBL 54	0,01 g	310 g	116 mm Ø
BBL 61	0,1 g	6100 g	174 x 143 mm
BBL 62	0,1 g	3100 g	174 x 143 mm
BBL 63	0,1 g	1500 g	174 x 143 mm
BBL 64	0,1 g	600 g	174 x 143 mm
BBL 71	1,0 g	6000 g	174 x 143 mm

All BBL models are supplied with jack for connecting a rechargeable battery pack and an AC adapter.

BBL 31  
BBL 32



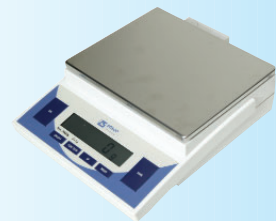
BBL 41  
BBL 42



BBL 53  
BBL 54



BBL 51  
BBL 52  
BBL 61  
BBL 62  
BBL 63  
BBL 64  
BBL 71



## ACCESSORIES FOR BBL BALANCES

Code	Description
SDA 02	RS-232 interface, for precision balances
SDA 03	RS-232 interface, for analytical balances (BBL 31+32)
SWE 21	Calibration weight, 200 g; E2 for BBL 31, BBL 41
SWE 22	Calibration weight, 100 g; E2 for BBL 32
SWE 63	Calibration weight, 100 g; F2 for BBL 54, BBL 41
SWE 62	Calibration weight, 500 g; F2 for BBL 53, BBL 64
SWE 61	Calibration weight, 1000 g; F2 for BBL 63, BBL 62
SWE 45	Calibration weight, 100 g; F1 for BBL 42
SWE 44	Calibration weight, 1000 g; F1 for BBL 52
SWE 42	Calibration weight, 2000 g; F1 for BBL 51
SWE 41	Calibration weight, 5000 g; F1 for BBL 71, BBL 61

## CALIBRATION WEIGHTS





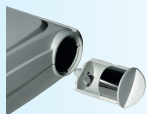
BEB 43



BEB 55



BEB 53  
BEB 61



Our range of economical portable balances designed to lead the way in providing precision weighing at a great price. Extensive application programs for use in the lab, field, industrial or educational environments. Quick accurate weighing powered by state-of-the art microprocessor technology ensures balance stability and reproducible results.

- ▶ Large easy to read high contrast LCD
- ▶ Sealed easy to clean keypad
- ▶ Stainless steel weighing pan
- ▶ Compact design
- ▶ Level indicator and adjustable feet
- ▶ Automatic calibration with external weight
- ▶ Applications include unit conversion, parts counting % weighing, display hold, totalising and specific gravity function
- ▶ Capable of displaying multiple modes:  
grams, carat, pound, ounces, troy ounces, Tael - Hong Kong, Tael - Singapore, Tael - Taiwan, grain, pennyweight, Tael - China and newton
- ▶ Supplied with power adaptor
- ▶ Security eyelet
- ▶ Battery saving sleep mode
- ▶ 2 years warranty

### BOECO BEB MODELS

Model	Readability	Capacity	Pan size
BEB 43	0,001 g	120 g	97 mm Ø
BEB 55	0,01 g	210 g	97 mm Ø
BEB 53	0,01 g	610 g	142 x 130 mm
BEB 61	0,1 g	5000 g	142 x 130 mm

◀ The models BEB 43, BEB 55 and BEB 53 have a calibration weight included in the scope of delivery

### BOECO BLC MODELS

Our range of low-cost balances, an alternative for most basic weighing applications.

- ▶ Simple three-key operation
- ▶ Large weighing pan
- ▶ Energy saving mode
- ▶ Usable with single 9V battery or power supply (both not supplied)
- ▶ Multiple weigh units
- ▶ Choose from: grams, ounces, pounds/ounces, pennyweight or troy ounces
- ▶ Parts counting application
- ▶ 2 years warranty



BLC

Model	Readability	Capacity	Pan size
BLC 500	0,1 g	500 g	138 x 138 mm
BLC 3000	1 g	3000 g	138 x 138 mm

## BOECO MOISTURE ANALYZER BMO 35

The comfortable way to determine moisture content of water, alcohol, fat, oil, etc., in

- ▶ food
- ▶ construction materials
- ▶ wood or paper
- ▶ chemicals or pharmaceuticals
- ▶ environmental analysis
- ▶ 3 years warranty

The BMO 35 moisture analyzer is fast, reliable, fully automatic and easy to use. After lowering the hood, two powerful infrared dark radiators begin drying the sample.

Featuring high milligram accuracy, it provides absolute reproducibility. The results can be printed in compliance with GLP protocols. The BMO 35 displays the results in % moisture, % dry weight, as a ratio - or as the weight itself.

New and easy symbols guides the user through the whole menu and applications.

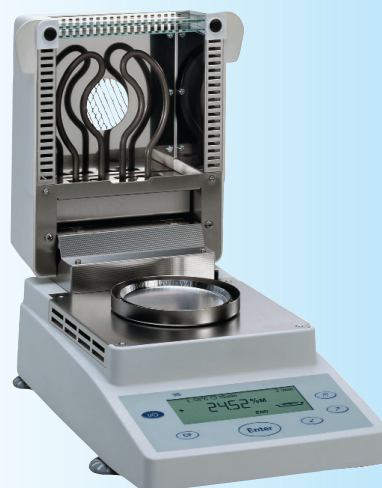
Endpoint determination will be done fully automatic. No need to program shut-off parameters. The drying process will be monitored constantly and the BMO 35 stops the drying process automatically when the weight of the sample is reached.

### Specification

Max. weighing capacity	35 g
Accuracy	1 mg
Reproducibility, average:	
Initial sample wt. from 1g and up	± 0,2 %
Initial sample wt. from 5g and up	± 0,05 %
Readability	0,01 %
Analysis mode	Fully automatic
Timer setting	0,1-99 min.
Temperature setting in 1-degree increments	40-160 C°
Operate guidance	By Icons
Interface port for data transfer to a printer	RS-232C
Housing (W x D x H)	224x366x191 mm
Weight	5,8 kg



BMO 35



BMO 35

Model	Accuracy	Capacity
BMO 35	0,001 g	35 g

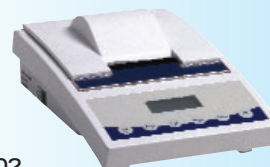
## ACCESSORIES FOR BMO 35

Code	Description
SMO 01-1	Round, aluminium sample pans (box of 80)
SMO 01-2	Glass fiber filters (box of 80)
SMO 01-3	Calibration weight, 30 g

## PRINTER SPR 02 FOR BOECO BALANCES

(for BBL models optional interface SDA 02 or SDA 03 required)

Code	Description
SPR 02	Printer with GLP/GMB function, date, time and statistical evaluation
SPR 01-1	Spare set of paper rolls ( 5 per box)
SPR 01-2	Spare ink ribbon cassette



SPR 02